### => d his

(FILE 'HOME' ENTERED AT 21:50:18 ON 17 JUL 2003)

FILE 'REGISTRY' ENTERED AT 21:50:28 ON 17 JUL 2003

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 2 S L1 FULL

=>

### => d all 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 350583-56-1 REGISTRY

CN 1-Piperazineacetic acid,

4-[2-[bis(4-fluorophenyl)methoxy]ethyl]-.alpha.-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C29 H30 F2 N2 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# Ring System Data

Elemental	Elemental	Size of	Ring System	Ring	RID
Analysis	Sequence		Formula		
EA	ES	SZ	RF	RID	Count
========	+========	+=======	+=== <b>===</b> -	-=======	+===== <b>=</b>
C6	C6	, <del>-</del>		46.150.18	3
C4N2	NC2NC2	6	C4N2	46.383.1	1

# Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	18.0	pH 1	(1) ACD
Bioconc. Factor (BCF)	137	pH 4	(1) ACD
Bioconc. Factor (BCF)	160	рн 7	(1) ACD
Bioconc. Factor (BCF)	125	рн 8	(1) ACD
Bioconc. Factor (BCF)	8.85	pH 10	(1) ACD
Boiling Point (BP)	623.1+/-55.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (HVAP)	97.02+/-3.0 kJ/mol		(1) ACD
Flash Point (FP)	330.6+/-56.7 deg C		(1) ACD
H acceptors (HAC)	5		(1) ACD
H donors (HD)	1		(1) ACD
Koc (KOC)	28.6	pH 1	(1) ACD
Koc (KOC)	218	pH 4	(1) ACD
Koc (KOC)	255	pH 7	(1) ACD
Koc (KOC)	200	рн 8	(1) ACD
Koc (KOC)	14.1	pH 10	(1) ACD
logD (LOGD)	3.05	pH 1	(1) ACD
logD (LOGD)	3.93	pH 4	(1) ACD
logD (LOGD)	4.00	pH 7	(1) ACD
logD (LOGD)	3.89	рн 8	(1) ACD
logD (LOGD)	2.74	pH 10	(1) ACD
logP (LOGP)	6.503+/-0.668		(1) ACD

```
Molar Solubility (SLB.MOL) | < 0.01 mol/L
                                              pH 1
                                                          (1) ACD
Molar Solubility (SLB.MOL) | < 0.01 mol/L
                                              pH 4
                                                           (1) ACD
Molar Solubility (SLB.MOL) | < 0.01 mol/L
                                              pH 7
                                                           (1) ACD
                                              pH 8
                                                           (1) ACD
Molar Solubility (SLB.MOL) | < 0.01 mol/L
                                              pH 10
                                                           (1) ACD
Molar Solubility (SLB.MOL) | <0.01 mol/L
                                                           (1) ACD
Molecular Weight (MW)
                           492.56
                           3.93+/-0.10
                                              Most Acidic (1) ACD
pKa (PKA)
                           8.47+/-0.50
pKa (PKA)
                                              Most Basic (1) ACD
                                              25.0 deg C (1) ACD
Vapor Pressure (VP)
                          2.19E-16 Torr
    Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.67
((C) 1994-2003 ACD)
               1 REFERENCES IN FILE CA (1957 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
REFERENCE 1
     135:107255 CA
AN
TI
     Preparation of polypharmacophoric agents
    Hanson, Robert N.; Babich, John W.
IN
     Biostream Therapeutics, Inc., USA
PΑ
     PCT Int. Appl., 74 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
IC
     ICM C07D241-04
     ICS C07D211-34; C07D211-44; C07D223-26
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 1
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                      _ _ _ _
                                            -----
     WO 2001051474
                       A2
                            20010719
                                           WO 2001-US1035
                                                             20010111
PΙ
     WO 2001051474
                       A3
                            20011206
        W: CA, JP
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE, TR
     US 2002042357
                                           US 2001-758957
                                                             20010111
                       A1
                            20020411
                                           EP 2001-902026
                                                             20010111
     EP 1257541
                       A2
                            20021120
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE,
FI, CY, TR
                                           JP 2001-551856
     JP 2003519689
                       T2
                            20030624
                                                             20010111
PRAI US 2000-175617P 20000111
     WO 2001-US1035
                      20010111
     Title compds. (I) comprise a scaffold bearing .gtoreq.2 pharmacophore units
selected from D1, D2, D3,
     and D4 agonists, (ir) reversible monoamine inhibitors, monoamine transporter
inhibitors, COMT inhibitors,
     MAO inhibitors, and dopamine transporter inhibitors. I interact with
.gtoreq.2 biol. targets. Thus,
     (E)-PhZCH(CO2H)CH:CHPh (Z = piperidine-4,1-diyl) was prepd. Data for biol.
activity of I were given.
     polypharmacophoric agent prepn; dopaminergic system agent prepn
st
IT
     Dopamine agonists
        (D1; prepn. of polypharmacophoric agents)
IT
     Dopamine agonists
        (D2; prepn. of polypharmacophoric agents)
IT
     Dopamine agonists
        (D3; prepn. of polypharmacophoric agents)
IT
     Nervous system
        (Huntington's chorea, treatment; prepn. of polypharmacophoric agents)
     Mental disorder
IT
        (attention deficit disorder, treatment; prepn. of polypharmacophoric agents)
```

```
IT
    Mental disorder
        (autism, treatment; prepn. of polypharmacophoric agents)
    Transport proteins
IT
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (dopamine-transporting, inhibitors; prepn. of polypharmacophoric agents)
IT
    Nervous system
        (dopaminergic; prepn. of polypharmacophoric agents)
ΙT
    Monoamines
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (inhibitors; prepn. of polypharmacophoric agents)
    Transport proteins
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (monoamine-transporting, inhibitors; prepn. of polypharmacophoric agents)
IT
    Anti-inflammatory agents
    Antidepressants
    Antiobesity agents
    Pharmacophores
        (prepn. of polypharmacophoric agents)
IT
    Alzheimer's disease
        (treatment; prepn. of polypharmacophoric agents)
    9001-66-5, monoamine oxidase 9012-25-3, Catechol O-methyl transferase
IT
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (inhibitors; prepn. of polypharmacophoric agents)
                 350583-53-8P
    67469-69-6P
                                                350583-58-3P
                                 350583-56-1P
                                                               350583-59-4P
             350583-61-8P
350583-60-7P
    350583-62-9P
                                  350583-64-1P
                                                 350583-65-2P
                                                               350583-66-3P
                   350583-63-0P
350583-67-4P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
        (prepn. of polypharmacophoric agents)
L3
    ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS
    350583-53-8 REGISTRY
RN
    1-Piperazineacetic acid,
CN
4-[2-(diphenylmethoxy)ethyl]-.alpha.-(2-phenylethenyl)- (9CI) (CA INDEX NAME)
FS
    3D CONCORD
    C29 H32 N2 O3
MF
SR
    CA
    STN Files: CA, CAPLUS, USPATFULL
LC
Ring System Data
Elemental | Elemental | Size of | Ring System |
                                            Ring
Analysis | Sequence
                   the Rings
                             Formula
                                         Identifier Occurrence
                                                   Count
                                RF
  EA
           ES
                    SZ
                                            RID
__________
                             C6
C6
         C6
                   6
                                        46.150.18 3
                            C4N2
C4N2
         NC2NC2
                   6
                                        46.383.1
```

# Calculated Properties (CALC)

PROPERTY (CODE)	,   VALUE	CONDITION	NOTE
	+=====================================	+=====================================	
Bioconc. Factor (BCF)	14.9	pH 1	(1) ACD
Bioconc. Factor (BCF)	112	pH 4	(1) ACD
Bioconc. Factor (BCF)	134	pH 7	(1) ACD
Bioconc. Factor (BCF)	105	рн 8	(1) ACD
Bioconc. Factor (BCF)	7.50	pH 10	(1) ACD
Boiling Point (BP)	621.5+/-55.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (HVAP)	96.80+/-3.0 kJ/mol		(1) ACD
Flash Point (FP)	329.6+/-56.7 deg C		(1) ACD
H acceptors (HAC)	5		(1) ACD
H donors (HD)	1		(1) ACD
Koc (KOC)	24.9	pH 1	(1) ACD
Koc (KOC)	188	pH 4	(1) ACD
Koc (KOC)	224	pH 7	(1) ACD
Koc (KOC)	177	8 Hq	(1) ACD
Koc (KOC)	12.6	pH 10	(1) ACD
logD (LOGD)	2.94	pH 1	(1) ACD
logD (LOGD)	3.82	pH 4	(1) ACD
logD (LOGD)	3.89	pH 7	(1) ACD
logD (LOGD)	3.79	pH 8	(1) ACD
logD (LOGD)	2.64	pH 10	(1) ACD
logP (LOGP)	6.400+/-0.547		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	8 Hg	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	456.58	i i	(1) ACD
pKa (PKA)	3.93+/-0.10	Most Acidic	(1) ACD
pKa (PKA)	8.48+/-0.50	Most Basic	(1) ACD
Vapor Pressure (VP)	2.64E-16 Torr	25.0 deg C	(1) ACD

- (1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.67 ((C) 1994-2003 ACD)
  - 1 REFERENCES IN FILE CA (1957 TO DATE)
  - 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

### REFERENCE 1

- AN 135:107255 CA
- TI Preparation of polypharmacophoric agents
- IN Hanson, Robert N.; Babich, John W.
- PA Biostream Therapeutics, Inc., USA
- SO PCT Int. Appl., 74 pp. CODEN: PIXXD2
- DT Patent
- LA English

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ICM C07D241-04
IC
    ICS C07D211-34; C07D211-44; C07D223-26
    27-16 (Heterocyclic Compounds (One Hetero Atom))
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     Section cross-reference(s): 1
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
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                      _ _ _ _
                           _____
     WO 2001051474
                      A2
                            20010719
                                           WO 2001-US1035
                                                           20010111
PΙ
     WO 2001051474
                      A3
                            20011206
        W: CA, JP
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SE, TR
    US 2002042357
                            20020411
                                           US 2001-758957
                                                            20010111
                      A1
    EP 1257541
                       A2
                            20021120
                                           EP 2001-902026
                                                            20010111
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE,
FI, CY, TR
                            20030624
                                           JP 2001-551856
                                                            20010111
     JP 2003519689
                      Т2
PRAI US 2000-175617P 20000111
    WO 2001-US1035
                      20010111
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AB
selected from D1, D2, D3,
     and D4 agonists, (ir)reversible monoamine inhibitors, monoamine transporter
inhibitors, COMT inhibitors,
    MAO inhibitors, and dopamine transporter inhibitors. I interact with
.qtoreq.2 biol. targets. Thus,
     (E)-PhZCH(CO2H)CH:CHPh (Z = piperidine-4,1-diyl) was prepd. Data for biol.
activity of I were given.
     polypharmacophoric agent prepn; dopaminergic system agent prepn
ST
IT
    Dopamine agonists
        (D1; prepn. of polypharmacophoric agents)
IT
    Dopamine agonists
        (D2; prepn. of polypharmacophoric agents)
IT
    Dopamine agonists
        (D3; prepn. of polypharmacophoric agents)
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    Nervous system
        (Huntington's chorea, treatment; prepn. of polypharmacophoric agents)
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        (attention deficit disorder, treatment; prepn. of polypharmacophoric agents)
IT
    Mental disorder
        (autism, treatment; prepn. of polypharmacophoric agents)
TT
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     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (dopamine-transporting, inhibitors; prepn. of polypharmacophoric agents)
IT
    Nervous system
        (dopaminergic; prepn. of polypharmacophoric agents)
IT
     Monoamines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (inhibitors; prepn. of polypharmacophoric agents)
IT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC
     (Process)
        (monoamine-transporting, inhibitors; prepn. of polypharmacophoric agents)
IT
    Anti-inflammatory agents
    Antidepressants
    Antiobesity agents
     Pharmacophores
        (prepn. of polypharmacophoric agents)
IT
    Alzheimer's disease
        (treatment; prepn. of polypharmacophoric agents)
```

9001-66-5, monoamine oxidase 9012-25-3, Catechol O-methyl transferase RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (inhibitors; prepn. of polypharmacophoric agents) 67469-69-6P 350583-53-8P 350583-56-1P 350583-58-3P 350583-59-4P 350583-60-7P 350583-61-8P 350583-62-9P 350583-63-0P 350583-64-1P 350583-65-2P 350583-66-3P 350583-67-4P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polypharmacophoric agents)